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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,174	10/03/2003	Charles Lee Edwards	TH1647 05 (US)	2866
7590 03/18/2004				
Jeffrey Y. Kao Shell Oil Company Legal-Intellectual Property P. O. Box 2463 Houston, TX 77252-2463			EXAMINER VOLLANO, JEAN F	
			ART UNIT 1621	PAPER NUMBER

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/679,174

**Applicant(s)**

EDWARDS ET AL.

**Examiner**

Jean F. Vollano

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-56 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

*Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, drawn to a alcohol composition , classified in class 568, subclass 671.
- II. Claims 5-17, 39-43 drawn to a alkyl ether sulfate composition of formula  $XOSO_3M$ , and a detergent composition thereof classified in class 562, 252, 556, 510 subclass various. It is noted that the application had claims 40, 41, 40, 41, 42-54. The second 40 and 41 have been changed by rule 26 to 42 and 43 and the rest of the claims have been renumbered 44-56.
- III. Claims 18-29 and 44-48, drawn to a diether sulfate composition and a detergent composition thereof, classified in class 562, 252, 556, 260, 510 subclass various.
- IV. Claims 30-38, 49-51. drawn to an diether alcohol composition and a detergent composition thereof, classified in class 568, 510 subclass various.
- V. Claims 52-55, drawn to a process for preparing any branched alcohol , classified in class 568, 252 subclass various.
- VI. Claim 56 , drawn to a process for preparing any alkyl ether sulfonate, classified in class 562, 252, subclass various.

The inventions are distinct, each from the other because of the following reasons:

Group I which has been allowed in part in US 6,706,931 is drawn to an alcohol composition of formula I. The composition and its detergent composition are patentably distinct from the other Groups which do not include the same structural alcohol. Group II is drawn to a composition having a compound of formula  $XOSO_3M$  and the detergent composition thereof. The composition is different from the alcohol composition of Group I and from the diether sulfonate

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composition of Group III which include a minimum of 5 oxygens. If any of these Groups were found under 35 USC 102 it would not obviate a 103 rejection over any other group.

Group IV is drawn to a diether alcohol composition and a detergent composition thereof. The structures of the compositions in Groups I-IV are different and they are patentably distinct and searching for them especially on line in chemical abstracts would be a burdensome search. The compositions which can be detergents are found in various classes (e.g. detergent class 510), composition class 252 as well as alcohol class 568, ether class 568, sulfonate class 562. There is a burdensome search. Group V is a process for preparing any branched alcohol. In part it was also allowed in US 6,706,931 to the extent that a compound of Group I was being prepared. However the claims are broader in scope that the preparation of the compounds in Group I and therefore the Group can prepare significantly different compositions than those of Group I. Therefore there is a patentable distinction.

Group VI is drawn to the preparation of any alkyl ether sulfate composition which again is broader than the compositions being claimed in Groups II or III and therefore can prepare a substantially different product than those being claimed.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

A telephone call was made to Mr Jeffery Kao on March 17, 2004 to discuss the election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean F. Vollano whose telephone number is 571-2720648. The examiner can normally be reached on Monday-Thursday 6:30 - 5:00.

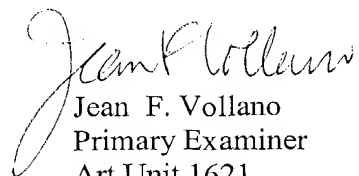
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272- 0646. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jean F. Vollano  
Primary Examiner  
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March 17, 2004